



# Closing the research-practice gap in healthcare:

## The development and usability evaluation of a patient handling incident investigation toolkit

### Aims

This research describes the development and useability evaluation of a system-thinking approach for investigating injuries to staff due to patient handling, referred to as the Patient Handling Review of Systems (PHIRES) Toolkit. The purpose of the PHIRES is:



Improve compliance with the Victorian OHS Regulation requiring workplaces to review and revise risk controls following the report of an musculoskeletal disorder.



Optimise the allocation of resources to control the risks associated with patient handling; and



Optimise risk controls to prevent future patient handling injuries;



Improve collaboration across all levels of the healthcare system in the prevention of patient handling injuries.

### Methods

The prototype PHIRES Toolkit was designed in collaboration with two universities, WorkSafe Victoria and health services in Victoria, Australia. Four Manual Handling Co-ordinators (three females, one male) from three health services participated in the implementation and evaluation of the PHIRES.

### RESULTS: DEVELOPMENT



### RESULTS: EVALUATION



Successfully completed the majority of steps without assistance of the research team.



Identified factors at each level of the system-thinking framework.



Generated actions that were aligned with system thinking principles.



Reported the Toolkit was a useful and comprehensive method for reviewing incidents.

### CONCLUSION

The prototype PHIRES Toolkit provides a standardised process for examining the work system following the report of a patient handling injury. This study provides evidence that systems-thinking models can be effectively translated into tools to help practitioners drive systemic change in healthcare. The PHIRES Toolkit is undergoing further development and evaluation.

### For more information

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